

CLAIMS

1. A device for transmitting a message for reception by another device, comprising:
a processor for adding location information to the message, before transmission,
5 wherein the location information identifies an area within which the message is to be
hosted for reception by the other device; and
a transmitter for transmitting the message, with the location information.
2. A device as claimed in claim 1, wherein the processor is arranged to create a
10 plurality of data structures by dividing the message into a plurality of separate message
portions and adding the same location information to each message portion and the
transmitter is controllable to transmit the data structures for storage in devices located
within the area.
- 15 3. A device as claimed in claim 2, for participating in an ad-hoc radio
communications network, wherein the transmitter is controllable to transmit the data
structures directly to neighbouring devices participating in the ad-hoc network and
located within the area.
- 20 4. A device as claimed in claim 2, further comprising a coder for redundantly
encoding the message portions.
5. A device as claimed in claim 2, wherein the processor adds a different sequence
number to each data structure.
- 25 6. A device as claimed in claim 2, wherein the processor adds the same ID to each
data structure.
7. A device as claimed in claim 6, wherein the ID identifies the device or device
30 user.
8. A device as claimed in claim 6, wherein the ID identifies the intended recipient
device or user of the message.
- 35 9. A device as claimed in claim 1, further comprising a user input for input of the
location information by a user of the device.

10. A device as claimed in claim 1 further comprising positioning means for positioning the device and determining at least a portion of the location information.
11. A device as claimed in claim 1 wherein the processor controls the transmitter to
5 transmit to a selected one or ones of neighbouring devices.
12. A device as claimed in claim 1, arranged to identify the location of neighbouring devices.
- 10 13. A device as claimed in claim 12, wherein the device is arranged to store the location dependent addresses of neighbouring devices.
14. A device as claimed in claim 13, wherein the transmitter selectively transmits directly to devices located within the area.
- 15 15. A method of locating a message within a particular area comprising the steps of:
adding location information to a message, before transmission, identifying the area within which the message is to be hosted; and
transmitting the message, with the location information.
- 20 16. A data structure for reception by a device and storage therein, comprising:
a message portion and an information portion, wherein the information portion identifies an area within which the data structure will be hosted by the device.
- 25 17. A device for receiving a message hosted as separate portions by a plurality of devices that are participating in an ad-hoc network and are located within an area identified by the message, comprising:
a transmitter for broadcasting a request within the ad-hoc network;
a receiver for receiving replies comprising portions of the message; and
30 a processor for reproducing the message from the received portions.
18. A device as claimed in claim 17, wherein the request comprises an ID identifying the device or its user.
- 35 19. A device as claimed in claim 17, wherein the request comprises an ID identifying the device or the user of a device from which a message is expected.

20. A device as claimed in claim 17, wherein the request additionally comprises an address for the device.

5 21. A device as claimed in claim 17, wherein the processor uses sequence numbers within the received portions for combining the message portions in the correct order.

22. A device as claimed in claim 17, wherein the message portions have been redundantly encoded and the processor uses a decoder to enable the message to be reproduced although not all of the portions of the message have been received.

10

23. A device for hosting a data structure comprising a portion of a message and an information portion identifying an area while the device remains within that area, comprising:

15 a memory for storing a data structure comprising a message portion and an information portion, wherein the information portion identifies an area;

positioning means for determining the location of the device; and

a transmitter controllable to transmit the data structure to another device when the positioning means indicates that the device is no longer located within the area.

20 24. A device as claimed in claim 23, arranged to identify the location of neighbouring devices.

25 25. A device as claimed in claim 23, wherein the device is arranged to store the location dependent addresses of neighbouring devices.

26. A device as claimed in claim 23, further comprising selection means for selecting the another device to which the data structure is transmitted.

30 27. A device as claimed in claim 23, wherein the another device is located within the area.

28. A device as claimed in claim 23, wherein the positioning means comprises at least a Global Positioning Satellite receiver.

35 29. A device as claimed in claim 23, wherein the positioning means comprises at least a cellular mobile telephone receiver.

30. A device as claimed in claim 23, arranged to store multiple data structures each data structure identifying the same area and comprising a different portion of the same message, wherein the transmitter is controllable to send the multiple data structures to one or more other devices located within the area when the positioning means indicates that the device is no longer located within the area.

31. A device as claimed in claim 23, arranged to store multiple data structures each data structure identifying the same area and comprising a portion of a different message, wherein the transmitter is controllable to send the multiple data structures to one or more other devices located within the area when the positioning means indicates that the device is no longer located within the area.

32. A device as claimed in claim 23, wherein the device transfers the data structure to the another device such that the data structure is removed from the memory.

33. A device as claimed in claim 23, arranged to participate in an ad-hoc network including the another device.

34. An adaptive database, for storing portions of a message as data structures, comprising an ad-hoc network of participating devices, each of which is as claimed in claim 23, wherein the participating devices are distributed within the area associated with the data structures.

35. An ad-hoc network of participating devices operable to locate the portions of a message within an area defined by each of the message portions, wherein the message portions are in distributed storage amongst participating devices within the area and each participating device is arranged so that when it moves from inside to outside the area the message portion(s), defining the area, stored by that device are transferred to another device within the area.

36. A device, for participating in an ad-hoc radio communications network and transmitting a message for receipt by another device, comprising a processor arranged to create separate data structures by dividing the message into a plurality of separate message portions and adding the same location information to each of the separate message portions; and

a transmitter for transmitting the data structures separately for storage in devices located within the area.

37. A device for transmitting a message for reception by another device, comprising:
a processor for adding location information to the message, before transmission,
wherein the location information identifies an area within which the message is to be
5 made available for reception by the other device; and
a transmitter for transmitting the message, with the location information.